CAAM 480: Pedagogy for CAAM 210 Rice Learning Assistants

Wednesdays and Fridays 2:00-2:50 PM in AEL A121

INSTRUCTOR CONTACT INFORMATION

Instructor: Franklin Kenter and Steve Cox
Office: FK in DCH 3014, SC in DCH 2007
Email: cox@rice.edu
Office Hours: FK Th 10-12, SC TTh 1-2

COURSE OBJECTIVES AND LEARNING OUTCOMES

CAAM 480 is designed to support Rice Learning Assistants (RLAs) as they instruct their own lab sections of CAAM 210. RLAs will be teachers in the lab sections, responsible for guiding students in achieving the goals of CAAM 210. The overarching goal of CAAM 210 is for students to gain MATLAB fluency on four planes:

1) to speak the language free of syntactic error;
2) to confidently translate English simulation and/or design questions;
3) to identify the proper numerical method for the job; and
4) to represent the solution in the most visually striking way possible.

These goals require significant opportunity for CAAM 210 students to engage with the content. The lab sections have been designed to allow RLAs to work with relatively small groups of CAAM 210 students to enhance their opportunities to achieve this fluency.

Our **course objectives** for the student of CAAM 480 are;

A) To strengthen and deepen their knowledge of modeling and programing to the degree that they may grasp the larger picture and so help their 210 students appreciate the context and interconnections of their many projects.
B) To acquire the basic skills of effective teaching and an appreciation for the challenges of education.

Accordingly, our **learning outcomes** are;

A) The ability to articulate, to both peers and students, the role of computation in science and engineering.
B) The ability to design and implement weekly lessons that foster cooperative learning among novices.
C) An understanding of the role of education in our culture.

REQUIRED TEXTS AND MATERIALS

All materials will be made available through our Owlspace page.

Exams and Papers

The Friday pedagogy sessions are optional for experienced RLAs. Our last 5 Fridays will however be novel for all. Hence, experienced RLAs must either participate in these sessions or submit a 500 word essay in response to the Dewey & Rorty readings, or submit a final project that has been pre-approved by the instructors.

Grade Policies

Your grade is based on participation. You will lose one grade letter for each unexcused absence.

Absence Policies

As you are graded on participation, attendance is critical.

Rice Honor Code

In this course, all students will be held to the standards of the Rice Honor Code, a code that you pledged to honor when you matriculated at this institution. If you are unfamiliar with the details of this code and how it is administered, you should consult the Honor System Handbook at http://honor.rice.edu/honor-system-handbook/. This handbook outlines the University's expectations for the integrity of your academic work, the procedures for resolving alleged violations of those expectations, and the rights and responsibilities of students and faculty members throughout the process.

Disability Support Services

If you have a documented disability or other condition that may affect academic performance you should: 1) make sure this documentation is on file with Disability Support Services (Allen Center, Room 111 / adarice@rice.edu / x5841) to determine the accommodations you need; and 2) talk with me to discuss your accommodation needs.

Syllabus Change Policy

This syllabus is only a guide for the course and is subject to change with advanced notice

Course Schedule

Week 1		
8/26	Content Prep for upcoming RLA session	
8/28	Cooperative Learning	
Week 2		
9/2	Content Prep for upcoming RLA session	
9/4	Building Trust With Students	
Week 3		
9/9	Content Prep for upcoming RLA session	
9/11	Giving Feedback, Caution: Praise Can be Dangerous	

Week 4		
9/16	Content Prep for upcoming RLA session	
9/18	The Nature of Good Questions	
Week 5		
9/23	Content Prep for upcoming RLA session	
9/25	Opening and Closing Class	
Week 6		
9/30	Content Prep for upcoming RLA session	
10/2	Learning and Memory	
Week 7		
10/7	Pledge Week, No class	
10/9	Pledge Week, No class	
Week 8		
10/14	Content Prep for upcoming RLA session	
10/16	Problem-Based Learning (Cox away)	
Week 9		
10/21	Content Prep for upcoming RLA session	
10/23	Why Do Student Development and Course Climate Matter for Student Learning	
Week 10		
10/28	Content Prep for upcoming RLA session	
10/30	John Dewey, Experience & Education, Chapters 1-2	
Week 11		
11/4	Content Prep for upcoming RLA session	
11/6	John Dewey, Experience & Education, Chapters 3-4	
Week 12		
11/11	Content Prep for upcoming RLA session	
11/13	John Dewey, Experience & Education, Chapters 5-6 (Cox away)	
Week 13		

11/18	Content Prep for upcoming RLA session	
11/20	John Dewey, Experience & Education, Chapters 7-8	
Week 14		
11/25	No Class	
11/27	Thanksgiving Recess: No Class	
Week 15		
12/2	Content Prep for upcoming RLA session	
12/4	Richard Rorty, Education as Socialization and Individualization	